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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,347	02/17/2000	Hideki Nakata	10873.498UAS01	7014

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EXAMINER

LE, KIMLIEN T

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 08/12/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/506,347

Applicant(s)

NAKATA ET AL.

Examiner

Kimlien T Le

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,28,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-8,28 and 30 is/are allowed.
- 6) ☒ Claim(s) 9-13 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on May 28, 2003 have been fully considered but they are not deemed to be persuasive.

Applicant asserts on page 6 :

“ Independent claim 9 recites that an optical head with a reflecting mirror mounted in an optical bench. No reference plane is formed for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror. This configuration is possible, for example, when using an external jig. See, e.g., page 6, lines 3-4.

As discussed above, the land 29 described in Goto is formed on the optical head. The land 29 serves as a reference plane and specifies the mounting angle of the mirror. Accordingly, Goto does not teach or suggest an optical head with no reference plane for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror”

The Examiner maintains that Goto et al.( U.S. Patent 5,091,793) discloses an optical head with no reference plane for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror ( See attached marked up copy of Fig. 2).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 10-13 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 9, line 8, the language “no reference plane is formed for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror” is unclear and confusing .

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10-13 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al. (U.S Patent 5,091,793).

Regarding claim 9, see Figs. 1-2 of Goto et al which show an optical head comprising: a light source(21); an objective lens (35); a reflecting mirror (29) that reflects beams of light from the light source to allow them to enter the objective lens; and an optical bench (26) for maintaining the light source and the reflecting mirror, wherein the reflecting mirror is bonded and fixed to the optical bench, and in a portion where the reflecting mirror is mounted in the optical bench, no reference plane is formed for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror (See attached marked up copy of Fig. 2).

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Regarding claim 10, see Figs. 1-2 of Goto et al which show the optical head according to claim 9, wherein the reflecting mirror is not in direct contact with the optical bench (see Figs. 1-2).

Regarding claim 11, see Figs. 1-2 of Goto et al which show The optical head according to claim 9, wherein the reflecting mirror is bonded and fixed at vicinities of approximate centers of its two opposed side faces approximately orthogonal to a reflecting plane of the reflecting mirror (see Figs. 1-2).

Regarding claim 12, see Figs. 1-2 of Goto et al which show the method of manufacturing an optical head according to claim 1, wherein the reflecting mirror has a flat-plate shape (see Figs. 1-2).

Regarding claim 13, see Figs. 1-4 of Goto et al which show method of manufacturing an optical head according to claim 1, wherein the reflecting mirror and the optical bench are bonded and fixed using a UV adhesive( column 4, lines 25-30).

Regarding claim 31, see Figs. 1-2 of Goto et al which show The optical head according to claim 9, wherein in the portion where the reflecting mirror is mounted in the optical bench, no reference plane is formed for specifying a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror through contact with the reflecting mirror ( Figs. 1-2).

***Allowable Subject Matter***

4. Claims 1,3-8, 28 and 30 are allowed.

The following is an examiner's statement of reasons for allowance:

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In independent claim 1, the limitation of a method of manufacturing an optical head comprising a light source, an objective lens, a reflecting mirror that reflects beams of light from the light source to allow them to enter the objective lens, and an optical bench for maintaining the light source and the reflecting mirror, the method comprising: placing the reflecting mirror and the optical bench on an external jig provided with a mirror holding portion for maintaining the reflecting mirror, bonding and fixing the reflecting mirror and the optical bench, with a reflecting plane of the reflecting mirror in contact with the mirror holding portion so as to specify a mounting angle of the reflecting mirror in a plane including an axis of light incident on and an axis of light reflected from the reflecting mirror, and after bonding and fixing the reflecting mirror and the optical bench, demounting the optical head having the light source, the reflecting mirror, and the optical bench from the external jig, is not anticipated, nor made obvious, over the prior art of record.

5. The dependent claims, being further limiting, definite and fully enabled by the Specification, are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

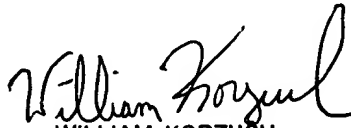
*Point of Contact*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimlien Le whose telephone number is 703 305- 3498. The examiner can normally be reached on M-F 8a.m-5p.m.

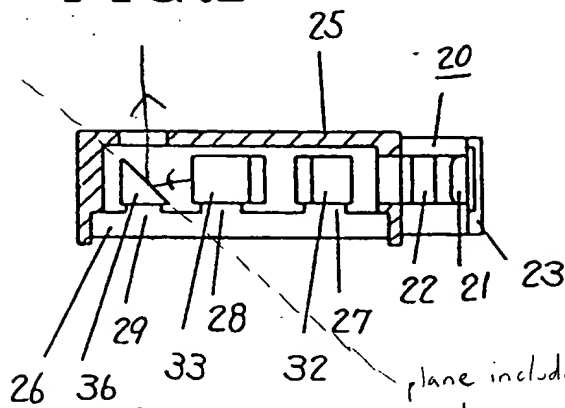
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 703 305- 6137. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9314 for regular communications and 703 872- 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

Kimlien Le  
August 11, 2003

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

**FIG.2**



plane including an axis of light incident on  
and an axis of light reflected from.  
This plane is not a reference plane for  
specifying mounting.